AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1.-20. (Cancelled)

21. (Currently Amended) A direct methanol fuel cell including a multiple number of connected unit cells, each composed of a fuel electrode element of a microporous carbon material, an electrolyte layer formed on the outer surface of the fuel electrode element, an air electrode layer formed on the outer surface of the electrolyte layer,

wherein the fuel cell further comprises: a fuel reservoir which stores at least a part of liquid fuel by an occluding element formed of a porous material and/or bundled fibers presenting capillarity;

a fuel feeder having an infiltration structure; and

a fuel supply system for supplying liquid fuel **[[**from**]]** to the fuel reservoir ~~to the fuel feeder~~ includes a second fuel reservoir and a valve element ~~and/or a collector element~~ configured to open and close by pressing the second fuel reservoir,

wherein each unit cell is connected to the fuel feeder having the infiltration structure and coupled with the fuel reservoir for storing liquid fuel, so as to supply liquid fuel thereto,

wherein the fuel electrode element and the fuel feeder adjoining the fuel electrode element are formed of a porous material and/or bundled fibers presenting capillarity.

22. (Previously Presented) A direct methanol fuel cell including a multiple number of connected unit cells, each composed of a fuel electrode element of a microporous carbon material, an electrolyte layer formed on the outer surface of the fuel electrode element, an air electrode layer formed on the outer surface of the electrolyte layer,

wherein the fuel cell further comprises: a fuel reservoir which stores whole portion of liquid fuel by an occluding element formed of a porous material and/or bundled fibers presented capillarity, wherein the fuel reservoir is substantially totally filled with the occluding element formed of a porous material and/or bundled fibers presenting capillarity;

a fuel feeder having an infiltration structure; and

a fuel supply system for supplying liquid fuel from the fuel reservoir to the fuel feeder includes a valve element and/or a collector element,

wherein each unit cell is connected to the fuel feeder having the infiltration structure and coupled with the fuel reservoir for storing liquid fuel, so as to supply liquid fuel thereto,

wherein the fuel electrode element and the fuel feeder adjoining the fuel electrode element are formed of a porous material and/or bundled fibers presenting capillarity.

23. (Previously Presented) The direct methanol fuel cell according to claim 21, wherein the terminal end of the fuel feeder is connected to a spent fuel reservoir.

24. (Previously Presented) The direct methanol fuel cell according to claim 21, wherein the fuel reservoir is constructed of a replaceable cartridge structure.

25. (Previously Presented) The direct methanol fuel cell according to claim 21, wherein the fuel electrode element provides the function of a fuel feeder.

26. (Previously Presented) The direct methanol fuel cell according to claim 23, wherein the fuel feeder is arranged from the fuel reservoir to the spent fuel reservoir, and the magnitudes of capillarity of the fuel reservoir, the fuel electrode element and/or fuel feeder adjoining the fuel electrode element and the spent fuel reservoir are selected so that the fuel reservoir < the fuel electrode element and/or fuel feeder adjoining the fuel electrode element < the spent fuel reservoir.

27. (Previously Presented) The direct methanol fuel cell according to claim 21, wherein the microporous carbon material is a carbon composite forming which is made up of amphorous carbon and powdery carbon, having micro continuous pores.

28. (Previously Presented) The direct methanol fuel cell according to claim 27, wherein the powdery carbon is composed of, at least, one selected from the group of highly ordered pyrolytic graphite (HOPG), kish graphite, natural graphite, artificial graphite, carbon nanotubes and fullerenes.

29. (Previously Presented) A direct methanol fuel cell including a multiple number of connected unit cells, each composed of a fuel electrode element of a microporous carbon material, an electrolyte layer formed on the outer surface of the fuel electrode element, an air electrode layer formed on the outer surface of the electrolyte layer,

wherein the fuel cell further comprises: a fuel reservoir which stores whole portion of liquid fuel by an occluding element formed of a porous material and/or bundled fibers presenting capillarity, wherein the fuel reservoir is substantially totally filled with the occluding element formed of a porous material and/or bundled fibers presenting capillarity; and

a fuel feeder having an infiltration structure, wherein each unit cell is connected to the fuel feeder having the infiltration structure and coupled with the fuel reservoir for storing liquid fuel, so as to supply liquid fuel thereto,

wherein the fuel electrode element and the fuel feeder adjoining the fuel electrode element are formed of a porous material and/or bundled fibers presenting capillarity.

30. (Previously Presented) The direct methanol fuel cell according to claim 29, wherein the terminal end of the fuel feeder is connected to a spent fuel reservoir.

31. (Previously Presented) The direct methanol fuel cell according to claim 29, wherein the fuel reservoir is constructed of a replaceable cartridge structure.

32. (Previously Presented) The direct methanol fuel cell according to claim 29, wherein the fuel electrode element provides the function of a fuel feeder.

33. (Previously Presented) The direct methanol fuel cell according to claim 30, wherein the fuel feeder is arranged from the fuel reservoir to the spent fuel reservoir, and the magnitudes of capillarity of the fuel reservoir, the fuel electrode element and/or fuel feeder adjoining the fuel electrode element and the spent fuel reservoir are selected so that the fuel reservoir < the fuel electrode element and/or fuel feeder adjoining the fuel electrode element < the spent fuel reservoir.

34. (Previously Presented) The direct methanol fuel cell according to claim 29, wherein the microporous carbon material is a carbon composite forming which is made up of amorphous carbon and powdery carbon, having micro continuous pores.

35. (Previously Presented) The direct methanol fuel cell according to claim 34, wherein the powdery carbon is composed of, at least, one selected from the group of highly ordered pyrolytic graphite (HOPG), kish graphite, natural graphite, artificial graphite, carbon nanotubes and fullerenes.